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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,715	07/20/2000	Hiroshi Niimi	FUJO 17.577	3322
26304	7590	04/01/2005	EXAMINER	
KATTEN MUCHIN ZAVIS ROSENMAN			RYMAN, DANIEL J	
575 MADISON AVENUE			ART UNIT	
NEW YORK, NY 10022-2585			PAPER NUMBER	
			2665	

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/620,715

Applicant(s)

NIIMI ET AL.

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/29/2004 have been fully considered but they are not persuasive. On the second page of Remarks, Applicant argues that Edens does not disclose that "bandwidth is allocated for each of the logical channels according to the number of picture data sets to be transmitted." Examiner, respectfully, disagrees. Edens discloses that "the data stream provides multiple channels for network devices to transmit to one another a variety of different data types having differing bandwidth requirements" where "[t]hese channels enable network devices to utilize precisely the amount of network bandwidth required by a particular data type" (col. 34, lines 16-26). Thus, Edens discloses that the bandwidth is allocated for each of the logical channels according to the number of picture data sets to be transmitted, i.e. the amount of network bandwidth required by a particular data type.
2. On the second page of Remarks, Applicant further argues that Edens allocates bandwidth when the number of requested channels exceeds the number of available channels by "(1) Providing a switching router for dividing the logical network, or (2) Increasing the bandwidth by some kind of network device." Applicant contrasts this with Applicant's invention in which "total bandwidth for the system is basically unchanged." However, Edens also discloses that "total bandwidth for the system is basically unchanged." *See* col. 33, lines 43-55 and col. 34, lines 22-23. While Edens discloses the above methods as a way to increase the available bandwidth in a system, Edens' main embodiment teaches reallocating bandwidth where the bandwidth for the system is basically unchanged (col. 33, lines 43-55 and col. 34, lines 22-23).

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3. For the above reasons, Examiner maintains that the rejection of claims 1-4 and 6-14 is proper.

Specification

4. Examiner requests that Applicant update the application information see on page 1, lines 4-7 of the specification in order to include any changes to the status of the application.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4 and 8-11, 13, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Edens et al (USPN 6,611,537).
7. Regarding claim 1, Edens discloses a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices, comprising: a network where a plurality of logical channels are established in a time division multiplex method (col. 9, line 56-col. 10, line 21); a distribution device (DSS tuner or DVD player) distributing picture data via a logical channel designated by a distribution instruction (col. 13, line 58-col. 14, line 30; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55); a plurality of receiving devices (televisions) receiving picture data from respective logical channels designated by receiving instructions (col. 13, line 58-col. 14, line 30; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55); and an allocation unit for allocating respective

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bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted (col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55).

8. Regarding claim 2, Edens discloses that the network is a ring-shaped transmission line (col. 9, line 56-col. 10, line 3).

9. Regarding claim 3, Edens discloses a determination unit determining a number of logical channels to be established in said network (col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55).

10. Regarding claim 4, Edens discloses an allocation unit allocating respective bands used to transmit picture data to the plurality of logical channels (col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55).

11. Regarding claim 8, Edens disclose that the distribution device generates a receiving instruction according to a received distribution instruction and transmits the receiving instruction to a corresponding receiving device via said network (col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55).

12. Regarding claim 9, Edens discloses a distribution device which is used in a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices via a network where a plurality of logical channels are established by a time division multiplex method, comprising a distribution unit (DSS tuner or DVD player) distributing picture data to a plurality of receiving devices (television) with a function to receive picture data from a logical channel designated by a receiving instruction via a logical channel

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designated by a distribution instruction (col. 13, line 58-col. 14, line 30; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55); and an allocation unit for allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted (col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55).

13. Regarding claim 10, Edens discloses a receiving device which is used as one of a plurality of receiving devices in a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices via a network where a plurality of logical channels are established by a time division multiplex method and respective bandwidth is allocated to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted (col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55), comprising a receiving unit (televisions) receiving a set of picture data from a logical channel designated by a receiving instruction, the set of picture data being transmitted from a distribution device (DSS tuner or DVD player) with a function to distribute picture data via a logical channel designated by a distribution instruction (col. 13, line 58-col. 14, line 30; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55).

14. Regarding claim 11, Edens discloses a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices, comprising: a network where a fixed-length frame composed of a plurality of time slots are transmitted (col. 9, line 56-col. 10, line 21 and col. 29, line 46-col. 30, line 37); one or more distribution devices (DSS tuner or DVD

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player) storing first picture data in a first time slot of the fixed-length frame, storing second picture data in a second time slot of the fixed-length frame, and transmitting the fixed-length frame to the network (col. 13, line 58-col. 14, line 30; col. 25, lines 3-20; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55); a plurality of receiving devices (televisions) receiving the respective picture data from the first or second time slots of the fixed-length frame according to a receiving instruction (col. 13, line 58-col. 14, line 30; col. 25, lines 3-20; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55); and an allocation unit for allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted (col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55).

15. Regarding claim 13, Edens discloses a picture distribution method for distributing picture data from a distribution device to a plurality of receiving devices, comprising: establishing a plurality of logical channels by a time division multiplex method (col. 9, line 56-col. 10, line 21); allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted (col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55); distributing picture data via a logical channel designated by a distribution instruction (col. 13, line 58-col. 14, line 30; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55); and a plurality of receiving devices receiving respective picture data from logical channels designated by corresponding receiving instructions (col. 13,

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line 58-col. 14, line 30; col. 40, lines 7-44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55).

16. Regarding claim 14, Edens discloses determining a number of logical channels to be established according to a number of picture data to be transmitted (col. 25, lines 9-12; col. 29, line 46-col. 30, line 37; col. 32, lines 28-43; col. 33, lines 19-67; col. 34, lines 17-26; and col. 53, line 64-col. 54, line 55); and generating the distribution instruction based on the determined number of logical channels and allocated bandwidth (col. 35, lines 11-20; col. 39, line 47-col. 40, line 44; col. 42, line 58-col. 44, line 33; and col. 53, line 64-col. 54, line 55).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edens et al (USPN 6,611,537) as applied to claim 5 above, and further in view of Natarajan (USPN 5,742,594).

19. Regarding claim 6, Edens does not disclose that priority is given in advance to the plurality of logical channels, and said allocation unit allocates respective bands to the plurality of logical channels based on the priority given to each logical channel; however, Edens does disclose using a priority value in order to determine a master clock device in the network (col. 48, lines 22-35 and col. 48, line 66-col. 49, line 43). Natarajan teaches, in a shared bandwidth communication network, that priority is given in advance to the plurality of logical channels

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(defining a number of logical channels in a frame which are available to a priority level), and said allocation unit allocates respective bands to the plurality of logical channels based on the priority given to each logical channel in order to allocate bandwidth to users requiring various types and amounts of data rate service (col. 1, line 64-col. 2, line 6; col. 3, lines 13-36; col. 5, lines 43-61; and col. 6, lines 20-64). It would have been obvious to one of ordinary skill in the art at the time of the invention to give priority in advance to the plurality of logical channels, and to allocate, by the allocation unit, respective bands to the plurality of logical channels based on the priority given to each logical channel in order to allocate bandwidth to users requiring various types and amounts of data rate service.

20. Regarding claim 7, Edens does not disclose that priority is given in advance to the plurality of receiving devices; and said allocation means allocates respective bands to said plurality of logical channels based on the priority given to each receiving device; however, Edens does disclose using a priority value in order to determine a master clock device in the network (col. 48, lines 22-35 and col. 48, line 66-col. 49, line 43). Natarajan teaches, in a shared bandwidth communication network, that priority is given in advance to the plurality of receiving devices (defining a priority level for a group of devices based on a type of data transmission); and said allocation means allocates respective bands to said plurality of logical channels based on the priority given to each receiving device in order to allocate bandwidth to users requiring various types and amounts of data rate service (col. 1, line 64-col. 2, line 6; col. 3, lines 13-36; col. 5, lines 43-61; and col. 6, lines 20-64) where the type of transmission also defines a priority for the receiving device since the application at the receiving device which receives the information defines the type of data which is transmitted. It would have been obvious to one of

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ordinary skill in the art at the time of the invention to give priority in advance to the plurality of receiving devices, and to allocate, by the allocation unit, respective bands to the plurality of logical channels based on the priority given to each receiving devices in order to allocate bandwidth to users requiring various types and amounts of data rate service.

21. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edens et al (USPN 6,611,537) as applied to claim 11 above, and further in view of Champlin et al (USPN 4,665,518).

22. Regarding claim 12, Edens does not disclose that if third picture data are requested to be distributed while the first and second picture data are being distributed, said one or more distribution devices store the first picture data in the first time slot of the fixed-length frame, store the second and third picture data in the second time slot of the fixed-length frame, and transmit the fixed length frame to said network. Champlin teaches, in a synchronous, time-division system, that if third data are requested to be distributed while the first and second data are being distributed, said one or more distribution devices store the first picture data in the first time slot of the fixed-length frame, store the second and third picture data in the second time slot of the fixed-length frame, and transmit the fixed length frame to said network in order to allow a single time slot to be shared (col. 18, lines 38-47) where it is implicit that sharing a single time slot increases the number of simultaneous users a system can support. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the second and third picture data in the second time slot of the fixed-length frame in order to allow a single time slot to be shared which increases the number of simultaneous users a system can support.

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Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 7:00-4:30 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DR

Daniel J. Ryman
Examiner
Art Unit 2665



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